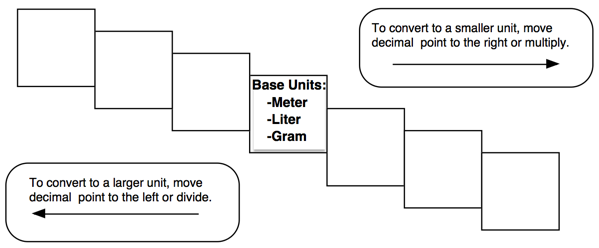
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

**Introduction to the Metric System**

* System of measurement used in almost all countries except for the United States
* Created in response to the CRAZY English system (feet, inches, pounds, etc.)
* Based on the POWER OF TEN!

**Three Major Units of Measurement:**

|  |  |  |  |
| --- | --- | --- | --- |
| Measurement | Unit | Abbreviation | Example |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |



Practice:

|  |
| --- |
|  |



1. A block of aluminum occupies a volume of 15 mL and has a mass of 40.5 g. What is its density?

2. Mercury metal is poured into a graduated cylinder that holds exactly 22.5 mL. The mercury has a mass of 306 g. From this information, calculate the density of mercury.

4. A rectangular block of copper metal weighs 1896 g. The dimensions of the block are 8.4 cm by 5.5 cm by 4.6 cm. From this data, what is the density of copper?

5. What is the volume of a silver brick with a mass of 2500 g? The density of silver is 10.5 g/cm3.

6. Find the mass of 250 mL of benzene. The density of benzene is 0.8765 g/mL.

7. A block of lead has dimensions of 4.50 cm by 5.20 cm by 6.00 cm. The block weighs 1587 g. From this information, calculate the density of lead.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

**Metric System Homework**

Directions: Write which unit of measurement would be **most** appropriate for measuring each item listed below. Choose from the measurements listed in the box.

|  |
| --- |
| Meter  Centimeter  Kilometer  Millimeter |

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_The distance from Los Angeles to Chicago
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_The height of a standard size window
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_The length of a ballpoint pen
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_The thickness of a penny
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_The height of a school locker
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_The width of a postage stamp
7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_The deepest part of Lake Michigan
8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_The width of a human hair

|  |
| --- |
| Liter  Milliliter  Kiloliter |

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Several drops of food coloring
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_A bathtub
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_A can of soup
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_A pitcher of iced tea
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Vanilla extract used when baking cookies
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_An Olympic-sized swimming pool
7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Water in an average home aquarium
8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_A bottle of perfume
9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_A lake
10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_A small cup of coffee

Directions: On the first line, write whether you would move the decimal point to the LEFT or RIGHT to complete each of the following problems. Then do the problem. **Show your work**.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 210 g = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ kg
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0.096 L = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mL
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 53 cm = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mm
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 34 m = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hm
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 85 mg = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ g

**METRIC CONVERSIONS – PRACTICE**

1. 100 mm = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ m
2. 89 kg = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mg
3. 25 dg = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ dag
4. 5 cl = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ kl
5. 450 dl = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cl
6. 3.4 dal = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ml
7. 1000 ml = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ L
8. 302 hl = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_kl
9. 101 mm = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ m
10. 29 dag = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mg
11. 30.5 cm = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ dm
12. 246 kg = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ g